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EXAMINER

LEROUX, ETIENNE PIERRE

ART UNIT	PAPER NUMBER
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2171

DATE MAILED: 09/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/933,888

Applicant(s)

KRISHNAMURTHY ET AL.

Examiner

Etienne P LeRoux

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5, 6 and 10-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 5, 6 and 10-13 include the words encourage and/or discourage.

Encourage/discourage is related to human behavior<sup>1</sup> and is meaningless in a technological context.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3 and 14-17 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pat No 6,314,565 issued to Kenner et al (hereafter Kenner '565).

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<sup>1</sup> to deprive of courage, hope, or confidence,; dishearten refer Webster's New World College Dictionary, Fourth Edition

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**Claim 1:**

Kenner '565 discloses:

- accessing at least a first set of data of a first document, the first document including markup language, wherein the first set of data includes selected data of the first document, the selected data at least partly specifying document data [Fig 1, 112]
- accessing at least a second set of data of a second document, the second document including markup language [Fig 1, 114]
- determining an edit sequence between at least part of the first set of data and at least part of the second set of data, the edit sequence including any insertions, deletions, and substitutions [col 6, lines 25-39]
- finding corresponding data of the second set of data, the corresponding data having a correspondence to the selected data, the correspondence at least partly found by determining the edit sequence [Fig 1, col 6, lines 25-39]

**Claim 2:**

Kenner '565 discloses wherein the edit sequence includes none of insertions, deletions and substitutions [Fig 2]

**Claim 3:**

Kenner '565 discloses wherein the edit sequence includes at least one of one or more insertions, one or more deletions, and one or more substitutions

**Claim 14:**

Kenner '565 discloses wherein document data is at least partly from the first document [col 6, lines 25-55]

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**Claim 15:**

Kenner '565 discloses wherein document data is at least partly from the second document  
[col 6, lines 25-55]

**Claim 16:**

Kenner '565 discloses wherein the second document is received if the second document  
is different from the first document [col 6, lines 25-55].

**Claim 17:**

Kenner '565 discloses wherein the markup language includes at least HTML (Hypertext  
Markup Language) [col 1, line39-50]

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in  
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are  
such that the subject matter as a whole would have been obvious at the time the invention was made to a person  
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the  
manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner '565 in  
view of US Pat No 6,377,945 issued to Risvik '945, hereafter Risvik '945.

**Claim 4:**

Kenner '565 discloses the elements of claim 1 as noted above.

Kenner '565 fails to disclose wherein the edit sequence is at last partly determined by  
calculating a total cost, and each of one or more of insertions, deletions, substitutions, and  
matches is associated with one or more costs

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Risvik '945 discloses wherein the edit sequence is at last partly determined by calculating a total cost, and each of one or more of insertions, deletions, substitutions, and matches is associated with one or more costs [abstract]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kenner '565 to include wherein the edit sequence is at last partly determined by calculating a total cost, and each of one or more of insertions, deletions, substitutions, and matches is associated with one or more costs as taught by Risvik '565.

The ordinarily skilled artisan would have been motivated to modify Kenner '565 for the purpose of determining possible impact of the editing operation in order to improve the invention.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kenner '565 and Risvik '945 and further in view of Pub No US 2002/0135800 issued to Dutta (hereafter Dutta '800).

**Claim 5:**

The combination of Kenner '565 and Risvik '945 discloses the elements of claims 1 and 4 as noted above.

The combination of Kenner '565 and Risvik '945 fails to disclose wherein the one or more costs are at least partly set to encourage the edit sequence to include one or matches between at least some markup language from the selected data of the first document and at least some markup language from the second document, the markup language including text-based content and tags.

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Dutta '800 discloses wherein the one or more costs are at least partly set to encourage the edit sequence to include one or matches between at least some markup language from the selected data of the first document and at least some markup language from the second document, the markup language including text-based content and tags [abstract].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Kenner '565 and Risvik '945 to include wherein the one or more costs are at least partly set to encourage the edit sequence to include one or matches between at least some markup language from the selected data of the first document and at least some markup language from the second document, the markup language including text-based content and tags as taught by Dutta '800.

The ordinarily skilled artisan would have been motivated to modify the combination of Kenner '565 and Risvik '945 for the purpose of reducing printing costs [paragraph 19].

Claims 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kenner '565 and Risvik '945 and further in view of US Pat No 6,556,984 issued to Zien (hereafter Zien '984).

**Claims 6 and 7:**

The combination of Kenner '565 and Risvik '945 discloses the elements of claims 1 and 4 as noted above.

The combination of Kenner '565 and Risvik '945 fails to disclose wherein a first cost is associated with a first match at a first distance from a root of a tree representation of some set of data.

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Zien '984 discloses wherein a first cost is associated with a first match at a first distance from a root of a tree representation of some set of data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Kenner '565 and Risvik '945 to include wherein a first cost is associated with a first match at a first distance from a root of a tree representation of some set of data as taught by Zen '984.

The ordinarily skilled artisan would have been motivated to modify the combination of Kenner '565 and Risvik '945 for the purpose of finding one or more strings from the set of strings that are closest matches to the target string [col 2, lines 49-53].

Furthermore, the combination of Kenner '565 and Risvik '945 fails to disclose a second cost is associated with a second match at a second distance from a root of a tree representation of some set of data, the first distance is less than the second distance, and the first cost and the second cost are set to encourage the first match more than the second match.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Kenner '565 and Risvik '945 to include a second cost is associated with a second match at a second distance from a root of a tree representation of some set of data, the first distance is less than the second distance, and the first cost and the second cost are set to encourage the first match more than the second match.

The ordinarily skilled artisan would have been motivated to modify the combination of Kenner '565 and Risvik '945 for the purpose of finding one or more strings from the set of strings that are closest matches to the target string [col 2, lines 49-53].



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**Claim 8:**

The combination of Kenner '565, Risvik '945 and Zien '984 discloses the elements of claims 1 and 4 as noted above.

The combination of Kenner '565, Risvik '945 and Zien '984 fails to disclose wherein a first cost is associated with a first deletion at a first distance from a root of a tree representation of some set of data, a second cost is associated with a second deletion at a second distance from a root of a tree representation of some set of data, the first distance is less than the second distance, and the first cost and the second cost are different,

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Kenner '565, Risvik '945 and Zien '984 to include wherein a first cost is associated with a first deletion at a first distance from a root of a tree representation of some set of data, a second cost is associated with a second deletion at a second distance from a root of a tree representation of some set of data, the first distance is less than the second distance, and the first cost and the second cost are different.

The ordinarily skilled artisan would have been motivated to modify the combination of Kenner '565, Risvik '945 and Zien '984 for the purpose of finding one or more strings from the set of strings that are closest matches to the target string [col 2, lines 49-53]

**Claim 9:**

The combination of Kenner '565, Risvik '945 and Zien '984 discloses the elements of claims 1 and 4 as noted above.

The combination of Kenner '565, Risvik '945 and Zien '984 fails to disclose wherein a first cost is associated with a first substitution at a first distance from a root of a tree

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representation of some set of data, a second cost is associated with a second substitution at a second distance from a root of a tree representation of some set of data, the first distance is less than the second distance, and the first cost and the second cost are different

Official notice is taken that wherein a first cost is associated with a first substitution at a first distance from a root of a tree representation of some set of data, a second cost is associated with a second substitution at a second distance from a root of a tree representation of some set of data, the first distance is less than the second distance, and the first cost and the second cost are different is well-known and expected in the art.

The ordinarily skilled artisan would have been motivated to modify the combination of Kenner '565, Risvik '945 and Zien '984 for the purpose of finding one or more strings from the set of strings that are closest matches to the target string [col 2, lines 49-53].

**Claim 10:**

The combination of Kenner '565, Risvik '945 and Zien '984 discloses the elements of claims 1 and 4 as noted above.

The combination of Kenner '565, Risvik '945 and Zien '984 fails to disclose wherein a first cost is associated with a first text-based content substitution such that a first length of substituting text-based content is substantially equal to a first length of substituted text-based content, second cost is associated with a second text-based content substitution such that a second length of substituting text-based content is substantially different from a second length of substituted text-based content, and the first cost and the second cost are set to discourage the second text-based content substitution more than the first text-based content substitution.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Kenner '565, Risvik '945 and Zien '984 to include wherein a first cost is associated with a first text-based content substitution such that a first length of substituting text-based content is substantially equal to a first length of substituted text-based content, second cost is associated with a second text-based content substitution such that a second length of substituting text-based content is substantially different from a second length of substituted text-based content, and the first cost and the second cost are set to discourage the second text-based content substitution more than the first text-based content substitution.

The ordinarily skilled artisan would have been motivated to modify the combination of Kenner '565, Risvik '945 and Zien 984 for the purpose of finding one or more strings from the set of strings that are closest matches to the target string [col 2, lines 49-53].

**Claim 11:**

The combination of Kenner '565, Risvik '945 and Zien '984 discloses the elements of claims 1 and 4 as noted above.

The combination of Kenner '565, Risvik '945 and Zien '984 fails to disclose wherein markup language includes at least text-based content and tags, and the one or more costs are at least partly set to discourage substitutions of text-based content for one or more tags.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Kenner '565, Risvik '945 and Zien '984 to include wherein markup language includes at least text-based content and tags, and the one or more costs are at least partly set to discourage substitutions of text-based content for one or more tags.

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The ordinarily skilled artisan would have been motivated to modify the combination of Kenner '565, Risvik 945 and Zien '984 for the purpose of controlling revisions and thereby improving the accuracy of the data in the document.

**Claim 12:**

The combination of Kenner '565, Risvik '945 and Zien '984 discloses the elements of claims 1 and 4 as noted above.

The combination of Kenner '565, Risvik '945 and Zien '984 fails to disclose wherein markup language includes at least text-based content and tags, and the one or more costs are at least partly set to discourage substitutions of one or more tags for text-based content.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Kenner '565, Risvik '945 and Zien '984 to include wherein markup language includes at least text-based content and tags, and the one or more costs are at least partly set to discourage substitutions of one or more tags for text-based content.

The ordinarily skilled artisan would have been motivated to modify the combination of Kenner '565, Risvik '945 and Zien '984 for the purpose of controlling revisions and thereby improving the accuracy of the data in the document.

**Claim 13:**

The combination of Kenner '565, Risvik '945 and Zien '984 discloses the elements of claims 1 and 4 as noted above.

The combination of Kenner '565, Risvik '945 and Zien '984 fails to disclose wherein a first cost is associated with preserving a first tag with unchanged attributes, a second cost is

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associated with preserving a second tag with one or more changed attributes, the first cost and the second cost are set to discourage preserving the second tag more than preserving the first tag.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Kenner '565, Risvik '945 and Zien '984 for the purpose of for the purpose of controlling revisions and thereby improving the accuracy of the data in the document.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner '565 in view of Pub No US 2001/0018693 issued to Jain et al (hereafter Jain '693).

**Claim 18:**

Kenner '565 discloses the elements of claim 1 as noted above

Kenner '565 fails to disclose wherein the markup language includes at least one of XML, a subset of XML, and a specialization of XML (eXtensible Markup Language).

Jain '693 discloses wherein the markup language includes at least one of XML, a subset of XML, and a specialization of XML (eXtensible Markup Language) [paragraph 72]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kenner '565 to include wherein the markup language includes at least one of XML, a subset of XML, and a specialization of XML (eXtensible Markup Language) as taught by Jain '693.

The ordinarily skilled artisan would have been motivated to modify Kenner '565 for the purpose of providing an output in a compatible format [paragraph 72]

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Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner '565 in view of Pub No US 2001/0043234 issued to Kotamarti (hereafter Kotamarti '234).

**Claim 19:**

Kenner '565 discloses the elements of claim 1 as noted above.

Kenner '565 fails to disclose wherein the markup language includes at least WML (Wireless Markup Language).

Kotamarti '234 discloses wherein the markup language includes at least WML (Wireless Markup Language) [paragraph 103]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kenner '565 to include wherein the markup language includes at least WML (Wireless Markup Language) as taught by Kotamarti '234.

The ordinarily skilled artisan would have been motivated to modify Kenner '565 for the purpose of including a small display screen [paragraph 103].

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner '565 in view of Pub No US 2001/0054009 issued to Miller et al (hereafter Miller '009).

**Claim 20:**

Kenner '565 discloses the elements of claim 1 as noted above.

Kenner '565 fails to disclose wherein the markup language includes at least one of SGML, a subset of SGML, and a specialization of SGML (Standard Generalized Markup Language).

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Miller '009 discloses wherein the markup language includes at least one of SGML, a subset of SGML, and a specialization of SGML (Standard Generalized Markup Language) [paragraph 278].

It would have been obvious to modify Kenner '565 to include wherein the markup language includes at least one of SGML, a subset of SGML, and a specialization of SGML (Standard Generalized Markup Language) as taught by Miller '009.

The ordinarily skilled artisan would have been motivated to modify Kenner '565 for the purpose of representing information from a wide range of domains [paragraph 278].

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne LeRoux whose telephone number is (703) 305-0620. The examiner can normally be reached on Monday – Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (703) 308-1436.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Etienne LeRoux

August 22, 2003.

  
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SUPERVISORY PATENT EXAMINER  
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